

RECEIVED

Access  
#43  
8/5/03 RS

PTO/SB/68 (07-03)

Approved for use through 7/31/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# REQUEST FOR ACCESS TO AN ABANDONED APPLICATION UNDER 37 CFR 1.14

Bring completed form to:

File Information Unit

Crystal Plaza Three, Room 1D01

2021 South Clark Place

Arlington, VA

Telephone: (703) 308-2733

In re Application of

Application Number

08/834 349

Filed

11-20-1997

Paper No. \_\_\_\_\_

I hereby request access under 37 CFR 1.14(a)(1)(iv) to the application file record of the above-identified ABANDONED application, which is identified in, or to which a benefit is claimed, in the following document (as shown in the attachment):

United States Patent Application Publication No. 6 585409, page, \_\_\_\_\_ line \_\_\_\_\_

United States Patent Number \_\_\_\_\_, column \_\_\_\_\_, line, \_\_\_\_\_ or

WIPO Pub. No. \_\_\_\_\_, page \_\_\_\_\_, line \_\_\_\_\_

## Related Information about Access to Pending Applications (37 CFR 1.14):

Direct access to pending applications is not available to the public but copies may be available and may be purchased from the Office of Public Records upon payment of the appropriate fee (37 CFR 1.19(b)), as follows:

For published applications that are still pending, a member of the public may obtain a copy of:

- the file contents;
- the pending application as originally filed; or
- any document in the file of the pending application.

For unpublished applications that are still pending:

- (1) If the benefit of the pending application is claimed under 35 U.S.C. 119(e), 120, 121, or 365 in another application that has: (a) issued as a U.S. patent, or (b) published as a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a copy of:
  - the file contents;
  - the pending application as originally filed; or
  - any document in the file of the pending application.
- (2) If the application is incorporated by reference or otherwise identified in a U.S. patent, a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a copy of:
  - the pending application as originally filed.

Darlene Jones  
Signature  
Darlene Jones  
Typed or printed name

Date

FOR PTO USE ONLY

Approved by: \_\_\_\_\_  
(initials)

Unit: \_\_\_\_\_

Registration Number, if applicable

(703) 418-0330

Telephone Number

This collection of information is required by 37 CFR 1.14. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. BRING TO: File Information Unit, Crystal Plaza Three, Room 1D01, 2021 South Clark Place, Arlington, VA.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



US006585409B2

(12) **United States Patent**  
Schmidt et al.

(10) Patent No.: **US 6,585,409 B2**  
(45) Date of Patent: **\*Jul. 1, 2003**

(54) **TEMPERATURE-MEASUREMENT DEVICE  
WITH DIFFRACTIVE OPTICS**

(75) Inventors: Volker Schmidt, Berlin (DE); William  
Menchine, Santa Cruz, CA (US);  
Hans-Jurgen Rostalski, Berlin (DE);  
Frank Wyrowski, Jena (DE)

(73) Assignee: Raytek Corporation, Santa Cruz, CA  
(US)

(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(h) by 0 days.

This patent is subject to a terminal dis-  
claimer.

(21) Appl. No.: 10/039,758

(22) Filed: Oct. 27, 2001

(65) **Prior Publication Data**

US 2002/0061048 A1 May 23, 2002

**Related U.S. Application Data**

(63) Continuation of application No. 08/836,369, filed on Oct.  
20, 1997.

(30) **Foreign Application Priority Data**

Aug. 3, 1995 (DE) ..... 195 28 590  
Jul. 29, 1996 (WO) ..... PCT/EP96/03330

(51) Int. Cl.<sup>7</sup> ..... G01K 1/00; G01J 5/02

(52) U.S. Cl. .... 374/121; 374/141; 33/DIG. 21;  
362/259; 250/491.1; 356/399

(58) Field of Search ..... 374/120, 121,  
374/124, 141, 208; 33/DIG. 21; 362/35,  
259; 356/49, 399; 250/491.1

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,315,150 A \* 2/1982 Darringer et al. .... 250/336.1

1,494,881 A 1/1985 Everest ..... 374/124

(List continued on next page.)

**FOREIGN PATENT DOCUMENTS**

DE	29 19 839 B1	10/1980	
DE	32 13 955 *	4/1982	
DE	32 13955 A1	10/1982	374/121
DE	36 03464 A1	10/1986	
DE	37 10486 C1	8/1988	
EP	0 458 200 B1	7/1994	
GB	2203537 *	10/1966	
GB	2 203 537 A	10/1988	
JP	57-22521 *	2/1982	374/121
JP	62-12848 *	2/1982	374/121
JP	62 12848	3/1987	

**OTHER PUBLICATIONS**

The Optometrics Group, Transmission Grating Beamsplit-  
ters, pp. 60, 61, 1993.\*

Patricia Mokry: "Unique Applications of Computer-Gener-  
ated Diffractive Optical Elements", Polaroid Corporation,  
Optical Engineering, Cambridge MA 02139 (1989).

Thomas K Gaylord, et al: "Analysis and Applications of  
Optical Diffraction by Gratings" *Proceedings of the IEEE*,  
vol. 73(5) pp. 894-937; May 1995.

Primary Examiner—Diego Gutierrez

Assistant Examiner—Mirellys Jagan

(74) Attorney, Agent, or Firm—Law Office of Charles E.  
Krucger

(57)

**ABSTRACT**

A device for temperature measurement uses an optical  
system to image the heat radiation emanating from a mea-  
surement spot on an object of measurement onto a detector.  
A sighting arrangement is also provided which has a dif-  
fractive optical system by which a light intensity distribution  
is produced which corresponds to the position and size of the  
measurement spot on the object of measurement.

2 Claims, 7 Drawing Sheets

